NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.

Safer Medical Device Implementation in Health Care Facilities

Sharing Lessons Learned

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.

What is this about?

Over the past year, our home health agency developed a Sharps Injury Prevention Team that aggressively implemented a performance improvement plan to select and evaluate safer medical devices for our home care providers. Primarily, we followed the guidelines set forth by NIOSH and over the course of time, learned lessons that we would like to share with you.

A little background…

In March of 2000, I was hired as the Agency's wound consultant in response to the new Prospective Payment System. Soon after I was hired, it became clear to me that supply management is an integral part of controlling costs under PPS, as it ties in closely with the selection of wound treatments and the utilization of home visits. I was given the added responsibility as supply/purchasing manager for one of the largest full-service home health agencies in our state.

With a 17-year background as a RN and presently an ET/ Wound Ostomy Continence Nurse, I have a deep appreciation for safety in the workplace. I have worked in the hospital, managed care, and home health care settings and have had the opportunity in these settings to gain extensive clinical, nursing management, research, utilization and program development experience, including the development of an infusion center. I also have experience with contract development, pricing negotiations, and the evaluation of new products. In the late 90's, I was responsible for instituting safer medical devices for a home health department within a large managed care organization.

Our home health agency was founded to help the indigent people in our city receive health care; consequently the majority of home visits are made in the inner city, but we service rural and suburban areas as well. Our organization is made up of 390 culturally diverse employees with 69% providing direct patient care. We make approximately 10,000 home visits per month, providing comprehensive home health care and hospice services for adults, maternal, and pediatrics.

In April 2001, I received a letter from our lab vendor stating the Needlestick Safety and Prevention Act was taking effect that month. As you have read, the new federal law authorized the Occupational Safety and Health Administration to revise the bloodborne pathogens standard to require employers to identify, evaluate and make use of effective, safer medical devices. Our lab vendors had historically provided the equipment needed to draw the specimens, but they informed me that it was "too expensive" for them to provide any safer medical devices. Our agency was in the middle of preparing for accreditation and time was of the essence, so I considered ordering various devices to adhere to the new law. However, when reviewing the NIOSH guidelines, I understood a multidisciplinary team that included front line providers was necessary.

Forming the team…

I collaborated with our Education Specialist to organize the **first meeting** in April 2001. This meeting included the following staff:

1. **OSHA Compliance Officer** (Director of Human Resource, Senior Administration)
2. **Quality Improvement Team representative** (Quality integrity support staff; in addition to QI, this representative also develops policy.)
3. **Infusion Manager** (Supervisor for the Infusion Team)
4. **Education Specialist** (Manager involved with staff education efforts and facilitated many of the meetings.)
5. **Supply/Purchasing Manager** (Organizes the purchase and storage of equipment and supplies; keeps vendor contacts; assists with contracting.)

We gathered literature obtained from various journals as well as distributed copies of the Needlestick Prevention and Safety Act a few days before the meeting. The goal of the meeting was to share information we had gathered and come to an agreement about the initial plan of action.

Our group contained key people in the Agency that would be able to:

- Contribute trends and statistics specific to our agency
- Understand our current policy and how that needed to change
- Have knowledge about some of the available products as well as what devices the Agency was currently using and what was needed
- Describe the relationship with various insurance companies that were contracted with specific distributors and how that effected the staff with regard to multiple devices used in the field
- Negotiate pricing and purchase the necessary quantity
- Understand how to effectively educate the staff
- Have the administrative buy-in and the power to effect change in the company

(*Also see “Lessons learned”)

This seemed to be a logical selection of employees to initiate the process, and due to time constraints I stayed with the smaller group. **Historically, smaller groups work more efficiently in our agency.** The outcome of our initial meeting included establishing the purpose of the committee, becoming familiar with the new law, sharing reviewed literature and coming up with goals for the next meeting.

The action items for the **second meeting** were:

1. The OSHA Compliance Officer will report on the statistics and trends of the past year with regard to exposure.
2. The Infusion Manager will provide manufacturer and order numbers of various safer devices found in the literature from the recent infusion symposium.
3. The Supply/Purchasing Manager will provide manufacturer and order numbers of various safer devices available through our current vendor.
4. The Supply/Purchasing Manager will have contacted one of the Agency's owner facilities (a large city hospital) to determine the safer devices they are currently using and if they are satisfied with those products.

These goals were achieved at the second meeting and goals for the **third meeting** were set:

1. The Infusion Manager and Supply Manager will bring to the table samples of safer devices obtained from various vendors.
2. The committee will determine how to roll-in providers for participation in the Sharps Injury Prevention Team.

These goals were also achieved. The Infusion Manager was not present for the third meeting however samples of safer devices or brochures of the device were presented to the Supply/ Purchasing Manager prior to the meeting. The Supply/Purchasing Manager became the facilitator at the meetings (designated coordinator) from this point onward, with the support of the Education Specialist to coordinate the upcoming inservice as well as encourage attendance and help schedule the Sharps Injury Prevention Team meetings. The Infusion Manager determined her schedule did not permit her to attend every meeting, however she acted as a consultant for infusion questions and facilitated the addition of other team members.

The addition of providers to the sharps injury prevention team…

The infusion manager suggested including the entire infusion team to select and evaluate the devices. **The team consisted of 15 direct care providers working in pediatrics, adult medical surgical and hospice, providing home care services to patients in the city, suburban and rural areas.** The members of the infusion team were already familiar with countless numbers of "safer medical devices" as managed care insurances required use of specific infusion equipment that was shipped directly to the patient's home.

The project was introduced to this group at a routine infusion team meeting. The group was given information regarding the Needlestick Safety and Prevention Act and the NIOSH guidelines. Collectively, the response was very positive as 100% of the team desired to participate and saw the project as valuable.

Lessons learned…

In retrospect, we should have included three or four members of the Infusion Team from the very beginning. These direct care providers would have clearly contributed toward a more efficient plan much sooner because of their practical knowledge.

Also, the meetings were consistently running 30 minutes over the scheduled time frame of one hour. Sticking to the agenda and having a timekeeper/ note taker would have made the meetings more efficient.

Staff hours and other cost items...

The literature search, preparation, phone calls, administrative requirements and coordination of those involved is included in the timetable below.

Type of Staff	Hours Spent on Phase 1
Management	52
Administrative	24
Front-line	15
Total	91

Other, non-labor items:

Item
Internet access for literature search
Xeroxing, paper
Overheads